Navy Environmental Health Center (BUMED M-11)
Ensuring Navy and Marine Corps readiness
through leadership
in prevention of disease and promotion of health

Frequently Asked Questions about

Targeted Condom Access for Disease and Pregnancy Prevention

Sexual Health and Responsibility Program (SHARP)

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This document does not establish Department of Navy policy.
It is intended to help leaders and medical professionals understand and apply targeted condom access as a disease and unplanned pregnancy strategy.
This document supercedes the previous version dated January 2002, and is available on the SHARP website.

Comments are encouraged and may be forwarded to:

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Views and opinions expressed are not necessarily those of the Department of the Navy

EXECUTIVE SUMMARY

Targeted condom access is one important component of a comprehensive Sexually Transmitted Diseases (STD) and unplanned pregnancy prevention program.

Navy Medicine has promoted sexual responsibility and condom access for many decades, with the goal of reducing the incidence of sexually transmitted diseases and unplanned pregnancies among Sailors and Marines.

STDs, including HIV – the virus that causes AIDS - are a major public health threat. Military members are at risk of exposure to STDs. In 2003, 100 active duty Sailors and Marines were newly infected with HIV, and thousands more were infected with other STDs. In 2003, more than 2 of 3 pregnancies among surveyed enlisted Sailors were unplanned.

Abstinence from sex, or long-term mutual monogamy, are the most effective means of preventing STDs. For people who decide to have sex outside a monogamous relationship, proper use of latex condoms reduces the risk of acquiring or spreading STDs, and reduces the chance of unplanned pregnancies.

However, less than half of surveyed unmarried active duty Sailors and Marines wore a condom the last time they had sex. Barriers to consistent condom use may include limited access or limited experience. Condom access efforts may enable some Sailors and Marines to overcome these barriers.

Condom distribution programs do not hasten the onset of sexual intercourse, nor increase sexual activity. Condom access efforts conducted by military commands should not be interpreted as encouraging sexual activity. Rather, condom distribution efforts encourage and enable safer behavior.

Although Sailors and Marines can and should buy condoms if they want to use them, making condoms easy to get, at strategic times and places, may increase the likelihood that people who choose to have sex will do so with a condom, rather than without a condom.

Condoms distributed within the Navy and Marine Corps for disease and pregnancy prevention may be paid for in the same way Navy and Marine Corps commands might fund disposable earplugs for hearing loss prevention.

Often an emotionally-charged issue, targeted condom distribution efforts require thoughtful planning and leadership courage. Access strategies should be sensitive to community concerns and perceptions. Specific examples are discussed herein.

Leadership support is essential.

Frequently Asked Questions
about
Targeted Condom Access for Disease and Pregnancy Prevention

Does the Navy and Marine Corps promote access to condoms?

Yes, in a thoughtful, targeted fashion. The objective is to reduce unprotected sex and thereby, reduce the incidence of sexually transmitted diseases (STDs) and unplanned pregnancies.

Examples of targeted access efforts include, but are not limited to, stocking condoms in some authorized medical allowance lists (AMALS) for Navy ships, and free condom access in some clinical settings and health fairs. Other opportunities include condom access in conjunction with the mandatory all-hands GMT/NMT sexual health lectures for Sailors, and the mandatory annual *Semper Fit* HIV-STD prevention lectures for Marines.

Are sexually transmitted diseases (STDs) a problem?

Yes.

Sexually Transmitted Diseases (STDs), including HIV are a major public health threat. The American Social Health Association (1998) estimated that there are 15.3 million new cases of sexually transmitted disease in the United States each year, at a direct medical cost of $8.4 billion per year.

Military members are at risk of exposure to STDs. Over 5000 active duty Sailors and Marines have been infected with HIV, and 100 more are newly infected with HIV each year. Thousands more are infected with other STDs, including chlamydia and gonorrhea (NEHC unpublished 2004). In 2002, about 4% of male Sailors and Marines and 5-7% of female Sailors and Marines said they had an STD in the past 12 months (Bray, et al 2004).

Where do Sailors and Marines become infected with STDs?

Our people are infected in the U.S. and abroad.

Military members are infected with STDs, including HIV within the continental U.S. (CONUS) and abroad. Navy surveillance data indicate a high percentage of reported STDs acquired in the CONUS. For example, the Atlantic fleet reported 97% of STDs were acquired CONUS (Schibly, 1998). Based on HIV subtypes, it seems a significant proportion of HIV infections among service members are probably acquired in CONUS (Brown, Newby, Ray, Jackson, & Burke, 1996; Brodine et al, 1995). STD frequency is probably higher CONUS due to the fact that most military personnel spend most of their time in CONUS.

Sailors and Marines are also at risk for STDs while deployed overseas. For example, four of five servicemen infected with non-B HIV subtypes reported sex with prostitutes in overseas ports (Brodine et al., 1995). A 1991 study of self-reported behavior among 1744 shipboard male Sailors and Marines during a six-month deployment found "high levels of risk behavior for the transmission of STDs" including an overall prostitute contact rate of 42%, and a "new STD" infection rate of 10% (Malone et. al., 1993). Another 1992 study of 2072 male shipboard Sailors and Marines found an overall prostitute contact rate of 42% during all previous overseas deployments. This study also reported an increased risk of infection with hepatitis B among members with a history of short deployments to the South Pacific region (9.8% positive for anti-HBc) and among members with a history of longer duty in the Mediterranean and South Pacific (19.4% and 17.3% positive, respectively) (Hawkins et al, 1992).

Are unplanned pregnancies a problem?

Yes.

Unplanned pregnancies among active duty Sailors continue to be of concern. In 2001, 10% of young (E-2 through E-4) female Sailors became pregnant (Uriell Z, 2001). Of all pregnancies among surveyed enlisted female Sailors during that year, only 1 of 3 (36%) was planned. In 2003, this rate fell even further to 30% (Ureill Z, 2004). The national *Healthy People 2010* objective is to increase the proportion of pregnancies that are intended to 70% (DHHS 2002).

In 2003, 31% of surveyed male enlisted Sailors and 15% of female Sailors said "when a birth control method is not available, I believe you just have to take a chance and hope a pregnancy does not occur". Interestingly, among enlisted Sailors who experienced an unplanned pregnancy in 2003, 50% were not using birth control (Uriell Z. 2004).

How can STDs and unplanned pregnancies be prevented?

Abstinence from sex, or long-term mutual monogamy, are the most effective means of avoiding STDs.

For people who decide to have sex outside a monogamous relationship, proper use of latex condoms reduces the risk of acquiring or spreading STDs, and reduces the chance of unplanned pregnancies.

People may further reduce risk by having sex with fewer people, and by not trading money for sex.

Do condoms work?

Yes - condoms reduce risk, but do not eliminate risk. According to the CDC (2003):

> *"Latex condoms when used consistently and correctly, are highly effective in preventing transmission of HIV, the virus that causes AIDS. In addition, correct and consistent use of latex condoms can reduce the risk of other sexually transmitted diseases. While the effect of condoms in preventing human papillomavirus (HPV) infection is unknown, condom use has been associated with a lower rate of cervical cancer, an HPV-associated disease."*

Condoms can be expected to provide varying levels of protection from different STDs. There is no one definitive study about condom effectiveness for all STDs. Several studies have demonstrated that condoms can reduce the risk for chlamydia, gonorrhea, and trichomoniasis, and may protect against herpes and syphilis. However, because not all studies have demonstrated protective effects, the body of evidence is considered inconclusive. Data are lacking regarding the degree of risk reduction for chancroid and genital Humanpapilloma Virus. The lack of data about condom effectiveness indicates that more research is needed – not that latex condoms don't work.

How are condoms used "correctly"

Studies indicate that a significant proportion of sexually active young Americans do not use condoms correctly. Mistakes include putting the condom on after some penetration has occurred, using petroleum-based lubricants with latex condoms, and failure to leave a reservoir at the tip of the condom.

For facts about correct condom use, please see the **attached** *SHARPFact* fact sheet Condoms and their use in preventing STDs.

Do Sailors and Marines Use condoms?

In 2002, about half of surveyed unmarried male active duty Sailors and Marines wore a condom the last time they had sex, and only about one-third of active duty unmarried females said a condom was used.

Condom Use at Last Sexual Encounter
Among Active Duty Unmarried Military Members – 2002 (Bray et al 2004)

	Male	Female
Sailors	49.1%	36.1%
Marines	45.1%	29.8%

(Note: the national Healthy People 2010 objective is not less than 50%)

What prevents people from using condoms to protect themselves?

Barriers to consistent condom use may include limited access, experience or skills in condom use. Some people feel condoms ruin the mood or reduce sensitivity. Condom access efforts may enable some Sailors and Marines to overcome these barriers. Alcohol intake may serve as a barrier to correct and consistent condom use.

Sailors and Marines may use the "access" opportunity to ask questions about how to correctly use condoms and how to negotiate condom use with their partner.

Getting condoms they can try may also help some people overcome anxiety about using condoms for the first time.

By informing people about the variety of condoms available, condom access efforts may help people overcome their dislikes about condoms.

Is cost a barrier to condom use?

Yes. Studies have shown that increased condom access results in increased condom use. People who had access to free condoms were more likely to use condoms that were people who paid as little as 25 cents for a condom (Cohen et al 1999a; Cohen et al 1999b; Cohen and Farley 2004). Access to free condoms is an effective public health strategy.

Why should the Navy and Marine Corps give away condoms – can't people buy them?

Sailors and Marines can and should buy condoms if they want to use them. Condoms are sold in every NEX and Marine Corps Exchange, not to mention many commercial establishments. Condoms can also be purchased over the internet.

But, in some foreign deployment locations, purchasing condoms may be inconvenient or impossible. Making condoms easy to get, at strategic times and places, may increase the likelihood that people who choose to have sex will do so with a condom, rather than without a condom.

Some people may be too embarrassed to be seen buying condoms. These people may be more likely to accept and use free condoms they can get inconspicuously in a clinic or on a ship, for example.

Cost may be a barrier for some people. Louisiana, which initiated a statewide condom social marketing campaign that involved free condom distribution, concluded that cost is a barrier to condom use and that free condoms should be distributed to encourage their use by persons at risk for STDs and HIV (Cohen, Scribner, Bedimo, and Farley, 1999).

Also, making condoms available in small quantities at health promotion events may increase the likelihood a person will ask about them (and learn how to use them correctly and consistently),

and may increase the likelihood that some people who are presently having unprotected sex will try them, and adopt them into their lifestyle.

Who pays for "free" condoms?

Condoms distributed within the Navy and Marine Corps for disease and pregnancy prevention may be paid for in the same way Navy and Marine Corps commands might fund disposable earplugs for hearing loss prevention. User commands may purchase condoms for targeted issue, and medical commands (pharmacy, health promotion, preventive medicine, and clinical medicine) may purchase condoms for targeted access, patient education, and population education.

Do condom access efforts increase sexual activity?

No.

Scientific research on this question has been primarily focused on adolescents and young adults. The evidence clearly suggests that condom distribution programs do not lead to earlier or more frequent sexual behavior (Franklin et al 1997, Wellings et al 1995, Kirby 1994). Condom availability has been shown to reduce STDs and pregnancy among adolescents (Wolk and Rosenbaum, 1995) and in some case to even decrease sexual activity (Blake et al, 2003; Seller et al., 1994). The evidence also shows that condom access decreases the frequency of unprotected sex and contributes to decreases in disease and pregnancy (Jemmont et al 1998).

Do condom access efforts in military commands imply that sexual activity is encouraged or condoned?

No.

Just as easy access to earplugs does not imply that people should expose themselves to loud noise, condom access does not imply people should have sex. By making access to earplugs and condoms easy, it is implied that safety is desired and expected. Condom access made easy by military commands should not be interpreted as encouraging sexual activity. Rather, targeted condom access efforts acknowledge risk and encourage and enable safer behavior to reduce that risk.

Why should I order condoms without spermicide?

Condoms with spermicides have a much shorter shelf-life than do condoms without spermicides.

Condoms with spermicides are no more effective than condoms without spermicide in preventing STD transmission (CDC 2003) or pregnancy (Hatcher et al 1998). In fact, the use of spermicide is not considered a reasonable choice of contraceptive when there is potential exposure to HIV, because frequent use of spremicides may theoretically irritate vaginal tissue and increase susceptibility to HIV infection (Hatcher et al 1998).

Is there a specific "Navy Issue" condom?

No. Commands may order condoms using National Stock Numbers or they may order directly from condom manufacturers or distributors. All the major brands have websites which provide ordering information and prices. There are many stock numbers in the federal supply system. The actual brand one receives through the supply system may vary, depending on recent periodic purchases made by the Defense Supply System. Notice that some are lubricated with spermicide (and have a much shorter shelf-life than do condoms without spermicides):

List of Condoms Managed by DSCP-Medical:				
NSN	Item Name	Spermicidally Lubricated?	Unit of Issue	Unit Price
6515-00-117-8416	CONDOM	No	PG of 144	$12.57 per PG
6515-01-153-4734	CONDOM	No	PG of 144	$33.54 per PG
6515-01-162-1800	CONDOM	No	PG of 36	$25.49 per PG
6515-01-266-3802	CONDOM	Yes	PG of 144	$14.00 per PG
6515-01-328-1906	CONDOM	Yes	PG of 2880	$318.20 per PG
6515-01-363-6545	CONDOM	Yes	PG of 1440	$18.43 per PG
6515-01-364-1422	CONDOM	Yes	PG of 1000	$287.16 per PG
6515-01-485-7192	CONDOM, FEMALE	No (Lubricant included)	PG of 1000	$1100.00 per PG

Some Navy authorized medical allowance lists (AMALS) include condoms. Here are some of them (again, notice that some are lubricated with spermicide, and have a much shorter shelf-life than do condoms without spermicides):

COG	AMAL #	NSN	Nomenclature	QTY	UI
9L	7701	6515001178416	CONDOM PROPHYLACTIC RUBBER LUBRICATED WITH RECEPTACLE END 144S	6	PG
9L	7702	6515001178416	CONDOM PROPHYLACTIC RUBBER LUBRICATED WITH RECEPTACLE END 144S	5	PG
9L	7703	6515001178416	CONDOM PROPHYLACTIC RUBBER LUBRICATED WITH RECEPTACLE END 144S	4	PG
9L	7704	6515001178416	CONDOM PROPHYLACTIC RUBBER LUBRICATED WITH RECEPTACLE END 144S	0	PG
9L	7015 (GMO/PA)	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG
9L	7035 (GMO/PA)	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG
9L	1013 (air)	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG
9L	2013	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG
9L	7023 (idc)	6515012663802	CONDOM RESERVOIR END NONOXYNOL-9 SPERMICIDAL LUB NAT RUBBER 144S	2	PG
9L	7002 (idc)	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG
9L	1021 (LHA)	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG
9L	2021 (LHA)	6515013281906	CONDOM SPERMICIDALLY LUBRICATED W/NONOXYNOL-9 RESERVOIR TIP2880S	1	PG

Anecdotal reports of condom breakage may have raised concerns among some Sailors and Marines about the quality of "Navy issue" condoms. A likely cause of quality degradation is improper storage (see Weiss, Olson and Brodine, 1992), such as leaving cases exposed to temperature extremes.

What is a "condom keychain"

SHARP purchases a condom keychain / compact as one mechanism to teach Navy medical professionals to teach their patients and populations about correct and consistent condom use. Each contains 2 male condoms and an information card. The front side of the card tells the reader how to get information from SHARP. The reverse side explains the advantage of abstinence or mutual monogamy for risk elimination, and explains that latex condoms reduce risk.

A condom container may promote correct and consistent condom use by people who choose to engage in sex outside a monogamous relationship because it (1) provides a discreet way to carry condoms and thus have them when needed, (2) protects the condoms from damage, (3) contains two condoms to facilitate replacement if the first tears or falls off, and (4) provides brief prevention information and the SHARP website address for those who want more information.

Commands that are interested in purchasing this product may contact SHARP.

What is the female condom?

The female condom is a polyurethane condom worn by a women. Please see the **attached** *SHARPFact* fact sheet Female Condoms.

How can a command conduct a successful condom access effort?

Condom access and education opportunities include:

- National Condom day (February 14th; Valentines Day)
- National STD Awareness Month (April)
- National Teen Pregnancy Prevention Day and Month (May 5th)
- World AIDS Day (December 1st)
- Men's Health Month (April)
- Women's National Health Week (May)
- Women's Health Month (Oct)
- General Military Training (GMT) on sexual health
- Semper Fit STD prevention training
- Navy Military Training (NMT) on sexual health
- Health fairs
- Safety stand-downs
- Liberty briefings
- Pre-deployment briefings
- Annual women's health examination
- Annual preventive health assessment (men and women)
- Health care provider offices, health promotion, preventive medicine, laboratory waiting area, pharmacy, sick call waiting areas
- Treatment for sexually transmitted disease
- Requests for a "conscience" check

Suggested rules of thumb:

- Keep your leaders informed of your condom access strategy – avoid surprises.

- Because it is often an emotionally-charged issue, targeted condom distribution efforts require thoughtful planning and leadership courage. Access strategies should be sensitive to community concerns and perceptions.

- Get buy-in from community stakeholders including chaplains, clinical department heads, women's health experts, health promotion, preventive medicine, local "A" school commanders, and enlisted leaders.

  Note about chaplains: Chaplains are an essential partner in sexual health promotion. They deliver value-based messages and provide individual counseling which supports responsible behavior. These services, which typically focus on risk elimination through abstinence and monogamy, compliment the comprehensive medical message that includes additional options for risk reduction. Together, Chaplains and medical professionals may reach the most people and do the most good. A fully-scripted, "all-hands", value-based, PowerPoint lecture written by and for Chaplains may be accessed from the SHARP website at **http://www-nehc.med.navy.mil/hp/sharp/presentations.htm**.

- Anticipate community sources of "complaints" or concerns, in coordination with stakeholders. Although pediatricians often have condoms for patient education, general promotion activities may minimize potential complaints by avoiding waiting areas that may include children. Buy-in from building "owners" can help prevent conflicts later. Let people voluntarily choose to take or ask about condoms – don't "force" condoms on people by placing condoms onto trays in galleys, etc. People should feel they are free to engage or not.

- Thoughtfully devise a strategy, in coordination with stakeholders, which targets the segment of your population you believe to be at risk. Strategies for condom access may be:

    - universal access: for example, some commands require every Sailor leaving a ship at every liberty port to take condoms from a bowl on the quarterdeck before disembarking. This strategy has the advantage of ensuring that every Sailor who will have sex has condoms available – even those that would not have taken condoms for fear of being seen taking them (fear of "discovery" or embarrassment). Another advantage is that all Sailors will have condoms to give to shipmates at risk. A disadvantage is that some Sailors may feel insulted. Issuing condoms and earplugs may help assuage concerns about the "message" being sent by leaders who adopt this universal access policy.

    - inconspicuous access: for example, most preventive medicine offices, health promotion offices, shipboard medical spaces, and adult-patient clinical settings have condoms available in a place that patients may help themselves inconspicuously. Restroom dispensers are another example.

    - educational opportunity access: for example, condoms offered to interested viewers of a sexual health display, at which a health professional or non-medical volunteer peer educator stands by to answer questions. Settings may be in a clinician's office, at a health fair, or at a display in a barracks, galley, or "A' school break room. These can be important awareness and knowledge building events.

- Sexual health promotion efforts should not be perceived as just "pushing condoms". Wherever you make condoms accessible, include a comprehensive prevention message that includes the fact that abstinence and monogamy can eliminate risk, and condoms reduce risk. Consider using the **attached** *SHARPFact* factsheet "Choosing Safer Options Reduces Risk".

- Every clinician, counselor or educator tasked to speak with patients or clients about sexual health, should have condoms available for people who say they want to try them. Stock these clinical settings with a variety of condoms for patient

education. Just having samples visible may generate patient questions and production risk reduction discussions.

- Teach health care providers to speak with their patients about correct and consistent condom use. Many clinicians are not comfortable or experienced in this skill. Consider making this an in-service training for providers. Ask SHARP for help.

- Be prepared for occasional misuse of "free" condoms. For example, a bowl of free condoms may disappear from a clinic and reappear as "balloons" taped to the ceiling of a barracks hallway. Help leaders understand that these occasional events are expected, and each may be used as another opportunity to educate. Rather than focusing on preventing a recurrence by limiting access and punishing perpetrators, consider maintaining the same level of inconspicuous access and engaging perpetrators as partners in promoting sexual health among their peers.

- Don't forget that most Sailors and Marines are infected with STDs while in the U.S. – condom access and sexual health education isn't just a "deployment" concern.

- For females who decide to have sex, help them know it is OK for females to get and carry condoms and insist on their use. It is their right and responsibility to protect their health.

- If you invite your local public health office or family planning partners to participate in health fairs, remember they may bring along condoms and messages appropriate for their populations. These messages may be focused to some extent on men who have sex with men and injecting drug users. Discuss these issues with your partners and stakeholders and decide which products and messages are appropriate for your Navy/Marine Corps health promotion effort.

For advice or support, contact NEHC SHARP

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ATTACHMENTS

SHARPFACT: Condoms and their Use in Preventing STDs
SHARPFACT: Female Condoms
SHARPFACT: Choosing Safer Options Reduces Risk
CDC Fact Sheet on Male Latex Condoms

SHARP FACTS

Condoms and Their Use in Preventing HIV and STD

Introduction

With nearly 1 million Americans infected with HIV, most of them through sexual transmission, and an estimated 15 million cases of other sexually transmitted diseases (STDs) occurring each year in the United States, effective strategies for preventing these diseases are critical.

Refraining from having sexual intercourse with an infected partner is the best way to prevent transmission of HIV and other STDs. But for those who have sexual intercourse, latex condoms are highly effective when used consistently and correctly. Condoms can be expected to provide different levels of risk reduction for different STDs. There is no one definitive study about condom effectiveness for all STDs. Several studies have demonstrated that condoms can reduce the risk of acquiring chlamydia, gonorrhea, trichomoniasis, syphilis, chancroid and herpes. However, because not all studies have demonstrated protective effects, the body of evidence is considered inconclusive. In addition, definitive data are lacking regarding the degree of risk reduction that latex condoms provide in preventing transmission of genital Humanpapilloma Virus. It is important to note that the lack of data about the level of condom effectiveness indicates that more research is needed – not that latex condoms don't work.

The correct and consistent use of latex condoms during sexual intercourse - vaginal, anal, or oral - can greatly reduce a person's risk of acquiring or transmitting HIV infection. In fact, recent studies provide compelling evidence that latex condoms are highly effective in protecting against HIV infection when used for every act of intercourse.

This protection is most evident from studies of couples in which one member is infected with HIV and the other is not, i.e., "discordant couples." In a 2- year study of discordant couples in Europe, among the 124 couples who reported consistent use of latex condoms, none of the uninfected partners became infected. In contrast, among the 121 couples who used condoms inconsistently, 12 (10 percent) of the uninfected partners became infected.

Condoms must be used consistently and correctly to provide maximum protection. Consistent use means using a condom with each act of intercourse. Correct condom use includes all of the following steps:

- Use a new condom for each act of vaginal, anal, or oral intercourse.
- Put on the condom as soon as erection occurs and before any vaginal, anal, or oral contact with the penis.
- Hold the tip of the condom and unroll it onto the erect penis, leaving space at the tip of the condom, yet ensuring that no air is trapped in the condom's tip.
- Adequate lubrication is important to prevent condom breakage, but use only water-based lubricants, such as glycerine or lubricating jellies (which can be purchased at any pharmacy). Oil-based lubricants, such as petroleum jelly, cold cream, hand lotion, or baby oil, can weaken the condom.
- Withdraw from the partner immediately after ejaculation, holding the condom firmly to the base of the penis to keep it from slipping off.

Myths About Condoms

Misinformation and misunderstanding persist about the effectiveness of condoms. The Centers for Disease Control and Prevention (CDC) provides the following updated information to address some common myths about condoms. This information is based on findings from recent studies.

Myth #1: Condoms frequently break. Some have questioned the quality of latex condoms. Condoms are classified as medical devices and are regulated by the Food and Drug Administration. Every latex condom manufactured in the United States is tested for defects before it is packaged. During the manufacturing process, condoms are double-dipped in latex and undergo stringent quality control procedures. Several studies clearly show that condom breakage rates in this country are less than 2 percent. Most of the breakage is likely due to incorrect usage rather than poor condom quality. Using oil-based lubricants can weaken latex, causing the condom to break. In addition, condoms can be weakened by exposure to heat or sunlight, or by age, or they can be torn by teeth or fingernails.

Myth #2: HIV can pass through condoms. A commonly held misperception is that latex condoms contain "holes" that allow passage of HIV. Laboratory studies show that intact latex condoms provide a highly effective barrier to sperm and micro-organisms, including HIV and the much smaller hepatitis B virus. Natural membrane or animal skin condoms, are not recommended for STD prevention. They contain natural pores in the membrane through which HIV and other STDs may pass.

Preventing HIV Infection and Other STDs: Recommended Prevention Strategies

Abstaining from sexual intercourse is the most effective HIV prevention strategy. For individuals who are sexually active, the following are highly effective:

- Engaging in sexual activities that do not involve vaginal, anal, or oral intercourse
- Having intercourse only with one uninfected partner
- Using latex condoms correctly from start to finish with each act of intercourse

Condoms for Women. The ***female condom*** or vaginal pouch has recently become available in the United States. A small study of this condom as a contraceptive indicates a failure rate of 21-26 percent in 1 year among typical users; for those who use the female condom correctly and consistently, the rate was approximately 5 percent. Although laboratory studies indicate that the device serves as a mechanical barrier to viruses, further clinical research is necessary to determine its effectiveness in preventing transmission of HIV. If a male condom cannot be used, consider using a female condom.

Plastic Condoms. A polyurethane male condom was approved by FDA in 1991 and is now available in the United States. It is made of the same type of plastic as the female condom. The lab studies show that the new polyurethane condoms have the same barrier qualities as latex. Lab testing has shown that particles as small as sperm and HIV cannot pass through this polyurethane material. A study of the effectiveness of this polyurethane condom for prevention of pregnancy and STDs is underway. The new polyurethane condoms offer an alternative for condom users who are allergic to latex. Also, polyurethane condoms can be made thinner than latex, have no odor, and are safe for use with oil-based lubricants.

Spermicides. In one study, of women at very high risk of exposure to HIV infection, researchers found that the women who used Nonoxynol-9 (N-9) gel had become infected with HIV at about a 50% higher rate than women who used a placebo gel. Further, the more frequently women used only N-9 gel (without a condom) to protect themselves, the higher their risk of becoming infected. Simply stated, **N-9 did not protect against HIV infection and may have caused more transmission**. Women who used N-9 also had more vaginal lesions, which might have facilitated HIV transmission. While N-9 will not offer any additional protection against HIV, a condom lubricated with N-9 is clearly better than using no condom at all. The protection provided by the condom against HIV far outweighs the potential risk of N-9. If given the choice, **condoms without N-9 may be a better option for HIV prevention**.

Where can I get more information?

Your medical care provider should be consulted if you think you may have been exposed to any sexually transmitted disease. CDC provides information through their National STD Hotline at (800) 227-8922 and their National AIDS Hotline at (800) 342-AIDS (2437). For further information regarding your sexual health, visit the SHARP Home Page at http://www-nehc.med.navy.mil/hp/sharp.

This information adapted by the Sexual Health and Responsibility Program (SHARP), Directorate of Health Promotion and Population Health, Navy Environmental Health Center in Norfolk Virginia from material developed by the Centers for Disease Control and Prevention, National Center for HIV, STD & TB Prevention, Division of HIV/AIDS Prevention

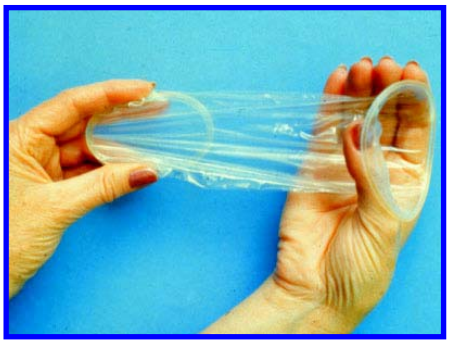
SHARP FACTS
Female Condom

Introduction
With nearly 1 million Americans infected with HIV, most of them through sexual transmission, and an estimated 15 million cases of other sexually transmitted diseases (STDs) occurring each year in the United States, effective strategies for preventing these diseases are critical.

Refraining from having sexual intercourse with an infected partner is the best way to prevent transmission of HIV and other STDs. But for those who have sexual intercourse, latex condoms are highly effective when used consistently and correctly. The correct and consistent use of latex condoms during sexual intercourse - vaginal, anal, or oral - can greatly reduce a person's risk of acquiring or transmitting STDs, including HIV infection. In fact, recent studies provide compelling evidence that latex condoms are highly effective in protecting against HIV infection when used for every act of intercourse.

Why a *female condom*?
In the U.S., **women** account for 26% of new AIDS cases reported in the most recent period according to the CDC. Women of color are particularly affected accounting for 64% of all new HIV infections. Latinas account for 18%. In one study, half of the pregnancies in Navy women were unplanned, and half of these women were not using any form of birth control.[2] Because of economic, social, and gender inequalities, **women have not always been able to successfully negotiate male condom use** with their partners. [3] For some women, female condoms may be an option for them to protect themselves from sexually transmitted disease, HIV, and unwanted pregnancy.

What is the *female condom*?
The female condom is made of polyurethane, a soft, thin plastic which is stronger than the latex used to manufacture most male condoms. The female condom is lubricated and disposable. The lubricant is non-spermicidal. It has a 5-year shelf life and is resistant to the deleterious effects of heat and humidity. The female condom fits loosely in the vagina and has a soft ring at each end. The ring at the closed end is used to put the device inside the vagina and to hold it in place during sex. The other ring (open end) stays outside the vagina.



Will a *female condom* Protect Me?
One study of this condom as a contraceptive indicates a failure rate of 21-26 percent in 1 year among typical users; for those who use the female condom correctly and consistently, the rate was approximately 5 percent. Unlike the male condom, the female condom protects the external female genitalia because its outer edge remains outside the vagina during sex – resulting in less skin-to-skin contact.

According to the Female Health Company: "One calculation of the risk of STD transmission estimates a 97.1% reduction in the risk of HIV infection with correct and consistent use of the female condom. Results of reliability studies show that the breakage rate for the female condom is substantially lower than the breakage rate for the

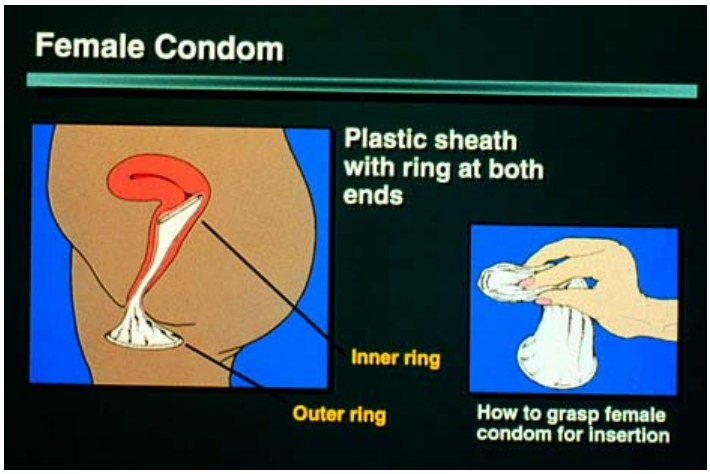
SHARP FACTS
Female Condom™

male latex condom. When the female condom is used consistently and correctly, the accidental pregnancy rate is similar to, or lower than, rates for the diaphragm, cervical cap, and contraceptive sponge. The polyurethane female condom does not produce skin irritation, allergic reactions, or vaginal trauma nor does it alter the vaginal flora." [4]

How Do I Use a *female condom* ?

The female condom can be inserted up to eight hours before sex begins. The woman inserts the female condom with her fingers, much like a tampon with no applicator.

- Prior to inserting the condom into the vagina, ensure the condom is completely lubricated on the outside and the inside.
- While holding the sheath at the closed end, grasp the soft, flexible inner ring and squeeze it with your thumb and middle finger so it becomes long and narrow. With the other hand, separate the outer lips of your vagina.
- Gently insert the inner ring into the vaginal canal. You should feel the inner ring go up and move into place. Next, place your index finger on the inside of the condom, and push the inner ring up as far as it will go. Be sure the sheath is not twisted. The outer ring remains outside of the vagina. The female condom is now in place and ready for use.



- Gently guide the penis into the sheath's opening to ensure that it enters properly. Be sure that the penis is not entering to the side of the sheath.
- To remove the condom, twist the outer ring and gently pull the condom out. Do this before standing up, to avoid any spillage. Throw the condom out in the garbage.
- *Use more lubricant* if: the penis does not move freely; the outer ring is pushed inside; you feel the female condom when it is in place; or the female condom comes out of the vagina during use.
- *Remove and insert a new female condom* if: the female condom rips or tears during insertion or use; the outer ring is pushed inside; the penis enters outside the pouch; the female condom bunches inside the vagina; or you have sex again. [4]

Where can I buy *female condoms?* The Female Health Company, the only manufacturer of the female condom, has an on-line index of stores that sell this product at http://www.femalehealth.com

Where can I get more information? Your medical care provider should be consulted if you think you may have been exposed to any sexually transmitted disease. CDC provides information through their National STD Hotline at (800) 227-8922. For further information regarding your sexual health, visit the Sexual Health and Responsibility Program Home Page at http://www-nehc.med.navy.mil/hp/sharp.

1 - CDC, HIV-AIDS Surveillance Report, Vol. 11 No. 1, page 3, June 1999
2 - Pregnancy and Single Parenthood in the Navy: Results of a 1997 Survey, TR-98-6, page vii, Navy Personnel Research and Development Center, Sep 1998
3 - Gilbert L., The Female Condom in the U.S., Lessons Learned, American Journal of Public Health, insert, Vol. 89, No. 6, page 6, June 1999
4 - Female Health Co., http://www.femalehealth.com/, as of 29 Mar 2000

SHARP FACTS

Choosing Safer Options Reduces Risk

Introduction

Nearly 1 million Americans are infected with HIV, most of them through sexual transmission. As many as one-third of these people don't even know they are infected. One in three cases of HIV infection in the U.S. now occurs in a women. About half of all infected women and some infected men were infected by heterosexual contact.[1] HIV is spread between men and women. In fact, women in the U.S. and around the world are becoming increasingly affected by HIV. Approximately 46%, or 14.8 million, of the 32.4 million adults living with HIV or AIDS worldwide are women. An estimated 15.3 million new sexually transmitted infections, including HIV, occur each year in the United States. Experts estimate that one in four Americans will become infected with a sexually transmitted disease in their lifetime. Effective strategies for preventing these diseases are critical.

How can we reduce our risk of getting one of these diseases? What are the options?

Abstain from sex or delay sex

Refraining from having sexual intercourse with an infected partner is the best way to prevent transmission of HIV and other STDs. People can choose to not have sex. People can also decide to wait, or delay sex, until a later time in their life. They may choose to have personal relationships that do not involve sex.

Choose Outer-course vs. Intercourse

Outer-course is non-penetrative contact, such as massaging, hugging, and kissing. Non-penetrative contact vs. intercourse can eliminate transmission risk for HIV and most (though not all) STDs.

But, if you choose to have sex, there are things you can do to reduce the risk of acquiring a sexually transmitted disease, including HIV:

Monogamy

Monogamy is sex between two people, who only have sex with each other, as part of a long-term relationship. If neither partner is infected, there is no risk of disease transmission. Getting to know your partner and his/her sexual history before you decide to have sex can also reduce your chance of exposure to disease. A series of short-term relationships is not as safe because of the increased risk that one of those partners will be infected.

Use Condoms and other barriers

Although not as safe as abstinence or monogamy, the correct and consistent use of latex condoms during sexual intercourse - vaginal, anal, or oral - can greatly reduce a person's risk of acquiring or transmitting many STDs, including HIV infection. In fact, recent studies provide compelling evidence that latex condoms are highly effective in protecting against HIV infection when used for every act of intercourse. A variety of male condoms are available. Female condoms and oral barriers are also available. Condoms can reduce both the risk of pregnancy and the risk of disease transmission. Put the condom on before any vaginal, anal, or oral contact.

Condoms can be expected to provide different levels of risk reduction for different STDs. There is no one definitive study about condom effectiveness for all STDs. Several studies have demonstrated that condoms can reduce the risk of acquiring chlamydia, gonorrhea, trichomoniasis, syphilis, chancroid and herpes. However, because not all studies have demonstrated protective effects, the body of evidence is considered inconclusive. In addition, definitive data are lacking regarding the degree of risk reduction that latex condoms provide in preventing transmission of genital Humanpapilloma Virus. It is important to note that the lack of data about the level of condom effectiveness indicates that more research is needed – not that latex condoms don't work.

Plastic Condoms. Studies show that the new polyurethane condoms have the same barrier qualities as latex. Lab testing has shown that particles as small as sperm and HIV cannot pass through this polyurethane material. A study of the effectiveness of this polyurethane condom for prevention of pregnancy and STDs is underway. The

new polyurethane condoms offer an alternative for condom users who are allergic to latex. Also, polyurethane condoms can be made thinner than latex, have no odor, and are safe for use with oil-based lubricants.

Condoms for Women. The "Reality" female condom™, also made of polyurethane, is lubricated and disposable. The lubricant is non-spermicidal. One study of this condom as a contraceptive indicates a failure rate of 21-26 percent in 1 year among typical users; for those who use the female condom correctly and consistently, the rate was approximately 5 percent. Unlike the male condom, the female condom™ protects the external female genitalia because its outer edge remains outside the vagina during sex – resulting in less skin-to-skin contact. If a male condom cannot, or will not be used, consider using a female condom.

Reduce the number of sexual partners

Many people who are infected with an STD don't know it, and you can't tell just by looking at them. The more people a person has sex with, the more likely it is that one (or more) will be infected with an STD. Though not as safe as abstinence or monogamy, reducing the number of people a person has sex with can reduce risk by reducing the number of potential exposures.

Do not have sex with "high-risk" people

You can't tell if potential partners are "high risk" just by looking at them. People who may be at higher risk of having a sexually transmitted infection include those who trade sex for money or sex for drugs, because they may have sex with many other people. Other people who may be at higher risk are people who share needles, because this activity can result in HIV, Hepatitis B and Hepatitis C infections, which can then be spread sexually. Non-monogamous men who have sex with men are also at higher risk of being infected with HIV and Hepatitis B because the risk of transmitting these viruses is greater with receptive anal intercourse than with vaginal or oral intercourse, and because these men may have many sex partners. Though not as safe as abstinence or monogamy, avoiding sex with "high-risk" people can reduce risk of exposure to a sexually transmitted infection.

Other things that can reduce the risk of infection with HIV or other STDs are:

Do not share needles or "works"

The safest thing a person can do is to not inject (non-prescription) drugs. For people who do continue to inject drugs, use a new, sterile needle from a reliable source each time. HIV and other viruses can be spread whenever needles are contaminated with blood - even small quantities of blood which may not be visible to the naked eye. This is true of all needles – including needles used for steroids, tattooing or body piercing. If sterile needles cannot be used, disinfect needles and syringes before and after each use.

Stay sober

Use of drugs or alcohol can affect sexual behavior because of reduced inhibitions and clouded judgment. Stay in control – stay sober.

Where can I get more information?

Your medical care provider should be consulted if you think you may have been exposed to any sexually transmitted disease. CDC provides information through their National STD Hotline at (800) 227-8922 and their National AIDS Hotline at (800) 342-AIDS (2437). For further information regarding your sexual health, visit the SHARP Home Page at http://www-nehc.med.navy.mil/hp/sharp.

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CENTERS FOR DISEASE CONTROL AND PREVENTION

For more information:
CDC's National Prevention Information Network
(800) 458-5231 or www.cdcnpin.org

CDC National STD/HIV Hotline
(800) 227-8922 or (800) 342-2437
En Espanol (800) 344-7432
www.cdc.gov/std

Fact Sheet for Public Health Personnel:

Male Latex Condoms and Sexually Transmitted Diseases

In June 2000, the National Institutes of Health (NIH), in collaboration with the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), and the United States Agency for International Development (USAID), convened a workshop to evaluate the published evidence establishing the effectiveness of latex male condoms in preventing STDs, including HIV. A summary report from that workshop was completed in July 2001 (http://www.niaid.nih.gov/dmid/stds/condomreport.pdf). This fact sheet is based on the NIH workshop report and additional studies that were not reviewed in that report or were published subsequent to the workshop (see "Condom Effectiveness" for additional references). Most epidemiologic studies comparing rates of STD transmission between condom users and non-users focus on penile-vaginal intercourse.

Recommendations concerning the male latex condom and the prevention of sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV), are based on information about how different STDs are transmitted, the physical properties of condoms, the anatomic coverage or protection that condoms provide, and epidemiologic studies of condom use and STD risk.

The surest way to avoid transmission of sexually transmitted diseases is to abstain from sexual intercourse, or to be in a long-term mutually monogamous relationship with a partner who has been tested and you know is uninfected.

For persons whose sexual behaviors place them at risk for STDs, correct and consistent use of the male latex condom can reduce the risk of STD transmission. However, no protective method is 100 percent effective, and condom use cannot guarantee absolute protection against any STD. Furthermore, condoms lubricated with spermicides are no more effective than other lubricated condoms in protecting against the transmission of HIV and other STDs. In order to achieve the protective effect of condoms, they must be used correctly and consistently. Incorrect use can lead to condom slippage or breakage, thus diminishing their protective effect. Inconsistent use, e.g., failure to use condoms with every act of

intercourse, can lead to STD transmission because transmission can occur with a single act of intercourse.

While condom use has been associated with a lower risk of cervical cancer, the use of condoms should not be a substitute for routine screening with Pap smears to detect and prevent cervical cancer.

Sexually Transmitted Diseases, Including HIV

> ***Sexually transmitted diseases, including HIV***
> *Latex condoms, when used consistently and correctly, are highly effective in preventing transmission of HIV, the virus that causes AIDS. In addition, correct and consistent use of latex condoms can reduce the risk of other sexually transmitted diseases (STDs), including discharge and genital ulcer diseases. While the effect of condoms in preventing human papillomavirus (HPV) infection is unknown, condom use has been associated with a lower rate of cervical cancer, an HPV-associated disease.*

There are two primary ways that STDs can be transmitted. Human immunodeficiency virus (HIV), as well as gonorrhea, chlamydia, and trichomoniasis – the discharge diseases – are transmitted when infected semen or vaginal fluids contact mucosal surfaces (e.g., the male urethra, the vagina or cervix). In contrast, genital ulcer diseases – genital herpes, syphilis, and chancroid – and human papillomavirus are primarily transmitted through contact with infected skin or mucosal surfaces.

Laboratory studies have demonstrated that latex condoms provide an essentially impermeable barrier to particles the size of STD pathogens.

Theoretical basis for protection. Condoms can be expected to provide different levels of protection for various sexually transmitted diseases, depending on differences in how the diseases are transmitted. Because condoms block the discharge of semen or protect the male urethra against exposure to vaginal secretions, a greater level of protection is provided for the discharge diseases. A lesser degree of protection is provided for the genital ulcer diseases or HPV because these infections may be transmitted by exposure to areas, e.g., infected skin or mucosal surfaces, that are not covered or protected by the condom.

Epidemiologic studies seek to measure the protective effect of condoms by comparing rates of STDs between condom users and nonusers in real-life settings. Developing such measures of condom effectiveness is challenging. Because these studies involve private behaviors that investigators cannot observe directly, it is difficult to determine

accurately whether an individual is a condom user or whether condoms are used consistently and correctly. Likewise, it can be difficult to determine the level of exposure to STDs among study participants. These problems are often compounded in studies that employ a "retrospective" design, e.g., studies that measure behaviors and risks in the past.

As a result, observed measures of condom effectiveness may be inaccurate. Most epidemiologic studies of STDs, other than HIV, are characterized by these methodological limitations, and thus, the results across them vary widely--ranging from demonstrating no protection to demonstrating substantial protection associated with condom use. This inconclusiveness of epidemiologic data about condom effectiveness indicates that more research is needed--not that latex condoms do not work. For HIV infection, unlike other STDs, a number of carefully conducted studies, employing more rigorous methods and measures, have demonstrated that consistent condom use is a highly effective means of preventing HIV transmission.

Another type of epidemiologic study involves examination of STD rates in populations rather than individuals. Such studies have demonstrated that when condom use increases within population groups, rates of STDs decline in these groups. Other studies have examined the relationship between condom use and the complications of sexually transmitted infections. For example, condom use has been associated with a decreased risk of cervical cancer – an HPV associated disease.

The following includes specific information for HIV, discharge diseases, genital ulcer diseases and human papillomavirus, including information on laboratory studies, the theoretical basis for protection and epidemiologic studies.

HIV / AIDS

HIV, the virus that causes AIDS
Latex condoms, when used consistently and correctly, are highly effective in preventing the sexual transmission of HIV, the virus that causes AIDS.

AIDS is, by far, the most deadly sexually transmitted disease, and considerably more scientific evidence exists regarding condom effectiveness for prevention of HIV infection than for other STDs. The body of research on the effectiveness of latex condoms in preventing sexual transmission of HIV is both comprehensive and conclusive. In fact, the ability of latex condoms to prevent transmission of HIV has been scientifically established in "real-life" studies of sexually active couples as well as in laboratory studies.

Laboratory studies have demonstrated that latex condoms provide an essentially impermeable barrier to particles the size of STD pathogens.

Theoretical basis for protection. Latex condoms cover the penis and provide an effective barrier to exposure to secretions such as semen and vaginal fluids, blocking the pathway of sexual transmission of HIV infection.

Epidemiologic studies that are conducted in real-life settings, where one partner is infected with HIV and the other partner is not, demonstrate conclusively that the consistent use of latex condoms provides a high degree of protection.

Discharge Diseases, Including Gonorrhea, Chlamydia, and Trichomoniasis

Discharge diseases, other than HIV
Latex condoms, when used consistently and correctly, can reduce the risk of transmission of gonorrhea, chlamydia, and trichomoniasis.

Gonorrhea, chlamydia, and trichomoniasis are termed discharge diseases because they are sexually transmitted by genital secretions, such as semen or vaginal fluids. HIV is also transmitted by genital secretions.

Laboratory studies have demonstrated that latex condoms provide an essentially impermeable barrier to particles the size of STD pathogens.

Theoretical basis for protection. The physical properties of latex condoms protect against discharge diseases such as gonorrhea, chlamydia, and trichomoniasis, by providing a barrier to the genital secretions that transmit STD-causing organisms.

Epidemiologic studies that compare infection rates among condom users and nonusers provide evidence that latex condoms can protect against the transmission of chlamydia, gonorrhea and trichomoniasis. However, some other epidemiologic studies show little or no protection against these infections. Many of the available epidemiologic studies were not designed or conducted in ways that allow for accurate measurement of condom effectiveness against the discharge diseases. More research is needed to assess the degree of protection latex condoms provide for discharge diseases, other than HIV.

Genital Ulcer Diseases and Human Papillomavirus

Genital ulcer diseases and HPV infections
Genital ulcer diseases and HPV infections can occur in both male or female genital areas that are covered or protected by a latex condom, as well as in areas that are not covered. Correct and consistent use of latex condoms can reduce the risk of genital herpes, syphilis, and chancroid only when the infected area or site of potential exposure is protected. While the effect of condoms in preventing human papillomavirus infection is unknown, condom use has been associated with a lower rate of cervical cancer, an HPV-associated disease.

Genital ulcer diseases include genital herpes, syphilis, and chancroid. These diseases are transmitted primarily through "skin-to-skin" contact from sores/ulcers or infected skin that looks normal. HPV infections are transmitted through contact with infected genital skin or mucosal surfaces/fluids. Genital ulcer diseases and HPV infection can occur in male or female genital areas that are, or are not, covered (protected by the condom).

Laboratory studies have demonstrated that latex condoms provide an essentially impermeable barrier to particles the size of STD pathogens.

Theoretical basis for protection. Protection against genital ulcer diseases and HPV depends on the site of the sore/ulcer or infection. Latex condoms can only protect against transmission when the ulcers or infections are in genital areas that are covered or protected by the condom. Thus, consistent and correct use of latex condoms would be expected to protect against transmission of genital ulcer diseases and HPV in some, but not all, instances.

Epidemiologic studies that compare infection rates among condom users and nonusers provide evidence that latex condoms can protect against the transmission of syphilis and genital herpes. However, some other epidemiologic studies show little or no protection. Many of the available epidemiologic studies were not designed or conducted in ways that allow for accurate measurement of condom effectiveness against the genital ulcer diseases. No conclusive studies have specifically addressed the transmission of chancroid and condom use, although several studies have documented a reduced risk of genital ulcers in settings where chancroid is a leading cause of genital ulcers. More research is needed to assess the degree of protection latex condoms provide for the genital ulcer diseases.

While some epidemiologic studies have demonstrated lower rates of HPV infection among condom users, most have not. It is particularly difficult to study the relationship between condom use and HPV infection because HPV infection is often intermittently detectable and because it is difficult to assess the frequency of either existing or new

infections. Many of the available epidemiologic studies were not designed or conducted in ways that allow for accurate measurement of condom effectiveness against HPV infection.

A number of studies, however, do show an association between condom use and a reduced risk of HPV-associated diseases, including genital warts, cervical dysplasia and cervical cancer. The reason for lower rates of cervical cancer among condom users observed in some studies is unknown. HPV infection is believed to be required, but not by itself sufficient, for cervical cancer to occur. Co-infections with other STDs may be a factor in increasing the likelihood that HPV infection will lead to cervical cancer. More research is needed to assess the degree of protection latex condoms provide for both HPV infection and HPV-associated disease, such as cervical cancer.

Department of Health and Human Services

For additional information on condom effectiveness, contact
CDC's National Prevention Information Network
(800) 458-5231 or **www.cdcnpin.org**